

REMARKS

Claims 1-20 are pending.

Claims 1-7 and 10-20 stand rejected.

Claim 18 is allowed.

Rejection of Claims under 35 U.S.C. §102

Claims 1-7, 10-17, and 19-20 are rejected under 35 U.S.C. § 102(b) as being anticipated by DeKoning et al. (U.S. Patent No. 6,304,942) (hereinafter referred to as “DeKoning”), as supported by Humlicek et al. (U.S. Patent No. 5,822,782) (hereinafter referred to as “Humlicek”), which is incorporated by reference in DeKoning. Applicants respectfully traverse this rejection.

Claim 1 recites “first, second and third devices each storing a respective copy of the data volume layout description or respective modified versions thereof in respective memories of the first, second and third devices.” This feature of claim 1 is neither taught nor suggested by the cited art.

The Examiner cites col. 7, lines 10-11 of DeKoning as teaching the above-quoted feature of claim 1. Office Action, p. 3. The cited portion of DeKoning states that the system can include on-media configuration storage called a Dacstore and incorporates Humlicek, which describes the Dacstore in more detail, by reference. Humlicek provides techniques “operable in a RAID subsystem to improve the speed and flexibility of initializing the subsystem by storing configuration and identification information in a reserved area on each disk drive in the subsystem.” Humlicek, Abstract. Thus, Humlicek describes storing configuration information for a RAID subsystem on each disk drive included within the RAID subsystem.

Applicant notes that storing configuration on disk drives is clearly different from “storing a respective copy of the data volume layout description or respective modified versions thereof in respective memories of the first, second and third devices.” In other words, storing information on a disk drive is clearly different than storing information in a device’s memory.

For at least this reason, the cited art does not teach or suggest “storing a respective copy of the data volume layout description or respective modified versions thereof in respective memories of the first, second and third devices,” as recited in claim 1.

Furthermore, the cited art does not teach or suggest “transmitting data input/output (I/O) transactions between the first device and the second device; [and] transmitting data (I/O) transactions between the first device and the third device,” as recited in claim 1.

The Examiner cites col. 3, lines 36-40 of Humlicek as teaching this feature of claim 1. The cited portion of Humlicek recites: “This added flexibility in RAID subsystem control may be used by an operator to help level the load of I/O requests across RAID subsystems or even across interconnect busses within a particular RAID subsystem.” Thus, the cited portion of Humlicek describes load-balancing I/O requests in a RAID subsystem.

Load-balancing I/O requests in a RAID subsystem does not teach or suggest transmitting I/O transactions between devices that store volume layout descriptions. As noted above, the portion of DeKoning cited as teaching the “devices” of claim 1 simply refers to Humlicek, which in turn describes storing configuration information on disk drives. Accordingly, the Examiner appears to be equating the disk drives that store configuration information with the “devices” of claim 1. However, the disk drives in the cited portion of Humlicek do not behave in the same manner as the devices of claim 1. In particular, these disk drives do not transmit I/O transactions to other disk drives, even when the load of the I/O requests is being leveled across the RAID subsystem. Instead, I/O requests are transmitted from the host system to the storage subsystem. *See, e.g.,* the description of FIG. 7 in Humlicek. The cited portions of Humlicek and DeKoning, both alone and in combination, neither teach nor suggest transmitting I/O transactions between devices that store volume layout descriptions.

Thus, Humlicek (both alone and in combination with the cited portions of DeKoning) clearly does not teach or suggest “transmitting data input/output (I/O) transactions between the first device and the second device; [and] transmitting data (I/O) transactions between the first device and the third device” where the first, second, and third device store “a respective copy of the data volume layout description or respective modified versions thereof.” Claim 1 is further patentable over the cited art for this reason.

For at least the foregoing reasons, claim 1 is patentable over the cited art, as are dependent claims 2-7 and 10-11. Claims 12-17 and 19-20 are patentable over the cited art for similar reasons.

Allowable Claims

Claims 8 and 9 were indicated as being allowable if rewritten in independent form. Applicant respectfully submits that these claims are allowable by virtue of their dependence upon an allowable base claim.

CONCLUSION

Applicant submits that all claims are now in condition for allowance, and an early notice to that effect is earnestly solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephone interview, the Examiner is requested to telephone the undersigned.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P. O. Box 1450, Alexandria, Virginia, 22313-1450, on October 6, 2006.

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